The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

STRATEGY RESEARCH PROJECT

CIVILIANIZING ARMY GENERATING FORCES

BY

LIEUTENANT COLONEL DONALD R. CURTIS, JR. United States Army

DISTRIBUTION STATEMENT A:

Approved for Public Release.
Distribution is Unlimited.

USAWC CLASS OF 2000



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

20000420 113

USAWC STRATEGY RESEARCH PROJECT

CIVILIANIZING ARMY GENERATING FORCES

by

LTC Donald R. Curtis Jr. U.S. Army

Col Richard Meinhart Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

U.S. Army War College CARLISLE BARRACKS, PENNSYLVANIA 17013

> DISTRIBUTION STATEMENT A: Approved for public release. Distribution is unlimited.

ii

ABSTRACT

AUTHOR:

LTC Donald R. Curtis Jr

TITLE:

Civilianizing Army Generating Forces

FORMAT:

Strategy Research Project

DATE:

10 April 2000

PAGES: 31

CLASSIFICATION: Unclassified

This paper examines the replacement of Army support forces, known as generating forces, with contractors and proposes criteria for when such contracting should and should not be accomplished. The paper begins with a historical review of contract support to Army operations from the Revolutionary War to present. A detailed look at the Logistics Civil Augmentation Program (LOGCAP) is included in this review. Following the review, the paper addresses the advantages and disadvantages of contracting combat support and combat service support on the battlefield and proposes criteria for when contractors should and should not be used. These criteria are then applied to a 1999 proposal by the Under Secretary of Defense for Acquisition and Technology to civilianize Army engineer units, to test the criteria's usefulness and applicability.

iv

TABLE OF CONTENTS

ABSTRACT	iii
PREFACE	····· vii
LIST OF ILLUSTRATIONS	ix
CIVILIANIZATION OF ARMY GENERATING FORCES	1
THE STRATEGIC ENVIRONMENT	1
HISTORICAL PERSPECTIVE - CONTRACTORS ON THE BATTLEFIELD	3
PRE-WORLD WAR II PERIOD	4
WORLD WAR II	5
KOREAN AND VIETNAM WARS	6
THE GULF WAR	7
LOGCAP	8
RECAP OF HISTORICAL EXPERIENCE	9
ADVANTAGES AND DISADVANTAGES OF CONTRACTING CS/CSS SUPPORT ON THE BATTLEFIELD	10
CRITERIA FOR USING CONTRACT SUPPORT ON THE BATTLEFIELD	12
USD (A&T) PROPOSAL TO CIVILIANIZE GENERATING FORCE	
CONCLUSION	
ENDNOTES	17
BIBLIOGRAPHY	19

νi

PREFACE

I would like to thank Ms. Kathy Churchman and Mr. Douglas Chyz from the Office of the Chief of Engineers, Mr. Peter Malley, Directorate of Combat Developments, U.S. Army Engineer School, and LTC Gerald O'Keefe, Office of the Deputy Chief of Staff for Operations, Force Programs Division for their help with the research and preparation of this research paper. I also would like to thank Col Richard Meinhart for all of his advice and guidance as my project advisor.

LIST OF ILLUSTRATIONS

FIGURE 1 DRID 20 MILITARY ESSENTIALITY CODES	. 2
FIGURE 2 GENERATING FORCE HIERARCHY	. 3
FIGURE 3 CRITERIA FOR WHEN CONTRACTORS CAN BE USED	13
FIGURE 4 CRITERIA FOR WHEN CONTRACTORS SHOULD NOT BE USED	14

X

LIST OF TABLES

TABLE 1 ASA (A&T) PROPOSAL FOR ENGINEER UNITS	. 14
TABLE 2 APPLICATION OF CRITERIA TO USD (A&T) PROPOSAL	. 15

CIVILIANIZATION OF ARMY GENERATING FORCES

Defense is expensive. Ethical Defense Policies, in keeping with our democratic principles, is even more so.

Gordon L. Campbell, U.S. Army Combined Arms Support Command

A common theme during U.S. inter-war periods is the reduction of logistical support forces, called generating forces, as a means to cope with external pressures to reduce force structure and costs. This trend continues today in the aftermath of the Persian Gulf War. Almost ten years later, and after a reduction of one third of the Active Army, there is more pressure to reduce generating forces for two primary reasons – to transfer generating force manpower to Army divisions, called operating forces, and to create savings which can be used for force modernization. This renewed pressure to reduce the generating force is embodied in an Under Secretary of Defense (Acquisition & Technology) proposal to civilianize 228K spaces in Active, Guard, and Reserve combat support and combat service support units, as part of the on-going Defense Review Initiative Directive #20 (DRID 20). Though not specifically stated, the "civilianized" functions would most likely be accomplished by contractors on the battlefield. This paper will deal with this issue, and its purpose is to establish criteria for deciding when it is appropriate to contract out battlefield generating force support.

This paper begins with an examination of the strategic environment since this embodies the current institutional pressure to reduce generating force structure. This is followed by an examination of the historical use of contractors to see what lessons are appropriate in today's environment. The historical review will focus on: service functions performed, the magnitude of the support provided, location on the battlefield, and contractor casualties incurred. In addition, the historical review will examine some of the more subjective aspects such as the impact on military effectiveness, contractor performance, and the military risks associated with the use of contractors in support of military operations. Next, this paper will examine the effectiveness of Army LOGCAP. Though just one form of contract, LOGCAP's umbrella approach to support provides us with the Army's most recent contracting experience at the lower end of the spectrum of Army operations. Based on this historical review, we'll assess the advantages and disadvantages of contracting on the battlefield and establish criteria for using contractors in support of Army operations. Finally, we'll use the criteria to assess the USD (A&T) proposal listed in Figure 1 for a select sample of engineer units.

THE STRATEGIC ENVIRONMENT

DRID 20 embodies the institutional pressure to reduce force structure. The stated purpose of DRID 20 was to develop uniform guidelines, criteria and reason codes for DOD Components to determine which functions and positions are 1) inherently governmental in nature, 2) exempt from competition and 3) identify commercial activities that should be competed.² The underlying intent of DRID 20 was to

determine what support functions and positions could be accomplished by the private sector. Implied in this effort was that privatizing those functions and positions save DOD money for force modernization or save spaces to be used to preserve operating forces.

Inherently Govi	Exempt		
Military I	Essential		
A Military Combat	B Cbt Aug		
	D Esprit de Corps		
	E Rotation		
CMilitary Unique	F Career Dev		
Civilian	Essential		
G Civ Authority	, National		
H Civ Experience	Security		
Restr	icted		
J Inti Agreement	L DoD Decision		
K Legislative Mand	late		
Revie	wable		
M Cost Compare			
N Pending Cont			
O Pending Cost	Term Cost R Subject to Review		

FIGURE 1 DRID 20 MILITARY ESSENTIALITY CODES

At the same time DRID 20 was being implemented, the Army was conducting Total Army Analysis (TAA 07) to determine what generating forces it required out to the year 2007. An important refinement of TAA 07 was the stated intent to account for every military requirement. Up to this point Total Army Analysis had never dealt with military spaces identified as requirements in the institutional (TDA) army. In TAA 07 all such spaces were identified, and a hierarchy was established with respect to military essentiality. This hierarchy is depicted in Figure 2. A natural link formed between DRID 20 and TAA, because both required the identification and classification of military spaces. Classification of spaces for DRID 20 in terms of military essentiality could be gleaned, almost directly, from the results of TAA. Therefore it became a stated TAA purpose to "... support [the] DRID [20] database...." It is through this linkage between DRID 20 and TAA that the pressure to contract generating force spaces manifests itself most strongly. On the one hand, DRID 20 caused the Army to look at what functions can be accomplished by contract and on the other, the Resourcing Phase of TAA caused the Army to look at where in the generating force it can afford to take risk in force structure. The net result was the identification of generating forces to contract.

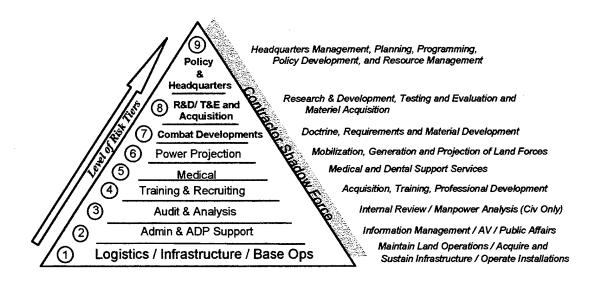


FIGURE 2 GENERATING FORCE HIERARCHY

The USD (A&T) proposal was one of a family of DOD staff actions resulting from DRID 20. The proposal was particularly significant because of its breadth and depth, and because it rested upon two important assumptions. First, the proposal assumed that most combat support (CS) and combat service support (CSS) performed by troops could be contracted. Secondly, and deviating somewhat from historical tradition, the proposal assumed contractors could provide the bulk of such support to troops in close contact with the enemy, as opposed to operating in relatively secure rear areas. In fact, the original proposal, as identified in a January 1999, USD (A&T) memorandum, listed approximately 114K deployable spaces for conversion. These two assumptions will guide much of the analysis that follows.

HISTORICAL PERSPECTIVE - CONTRACTORS ON THE BATTLEFIELD

Historically, there is nothing new about using contractors to support Army operations. In fact, more often than not, the Army has lacked the support forces required to obviate the use of contractors. Traditionally, contractors have provided much of the transport, maintenance, supply and general labor in both war and peace. Over time, contractors have been called on to provide more services on the battlefield. The purpose of this historical survey is to uncover trends that may be useful in the analysis of the Army's approach to USD (A&T) policy.

PRE-WORLD WAR II PERIOD

Starting with the American Revolution, the Army relied on civilian contractors for food, clothing, transport, and labor, and the advantages and disadvantages of using contractors were known to our military and civilian leaders. Profiteering had been a problem and failures by contractors had at times brought the Army to near ruin. Still, the Continental Army could not achieve its military aims without contractor support. The first contracting system, following the tradition of European armies, required Army officer or civilian agents to directly purchase services on behalf of the Continental Congress. Because of a combination of abuses, by both the contractors and the government, and generally poor performance, the system evolved from direct purchase to "the system of specific supplies." Under this system, states undertook the responsibility to provide, in kind, supplies the Army required. Again, the system failed to provide responsive support to the Army and by 1783, the Army adopted a system of entering into major contracts awarded to the lowest bidder. This is the basic system the Army still uses today, and the basic issues are the same as stated in the following quotation.

The Army's experience with private contractors in the War for Independence contained most of the elements which would characterize the later use of contractors on the battlefield: mixed results in terms of performance and adequate support for the troops; lack of experience and expertise on the part of Army officers dealing with contractors; lack of clarity in communications between the Army and supporting contractors as to requirements, capabilities and costs; financial manipulation and desire to increase profits at the expense of the Army on the part of contractors. ⁶

Following the Revolution, the Army's supply system evolved and became more effective. Arsenals were established and staff positions were created to oversee major logistical functions following the War of 1812. Still, private contractors were required when the Army had to mobilize rapidly. During the Mexican War, the control and discipline of contractors, particularly teamsters, became a principle issue. The Quartermaster General even pressed for the formation of a corps of maintenance, teamsters and laborers under military control as a way of decreasing costs and increasing effectiveness. The request was disapproved, but the idea would re-immerge prior to World War I.

In the Civil War, one sees an increased use of private contractors to provide specialized service support. For example, the Army acquired 5000 contract surgeons and 15,000 nurses for medical support. Civilian detectives, like Allen Pinkerton's, gathered tactical intelligence. Quality of life support was enhanced by sutlers, who accompanied troops supplementing their rations. Another important trend that immerged during the Civil War was reliance on private contractors to service the most advanced technologies, such as the railroads and the telegraph. This was natural as the Army had no technical expertise to operate these technologies on its own. This trend continues today, as witnessed by the use of systems contractors used to maintain and provide technical support to complex weapons systems.

Following the Civil War there is increased emphasis on creating Army support forces and the use of host nation contractors. The Spanish American War caused the Army to find ways to logistically support U.S. forces outside the continental United States. The Army contracted for Chinese labor to

support forces in the Philippines, the first use of large amounts of foreign contract labor. This happened again in WWI where the contract labor force grew to 85,000, composed of a mix of French, British, North African, Italian, and Chinese nationals. Contracting for host nation support was done partly by choice and partly as a function of participating in coalition warfare. To get to the fight, the Army initially used contract crews to man its ships, but turned to the Navy to transport all troops and most of its supplies after contract crews either failed to show or refused to sail. During WWI the Army increased its own logistical capability. In 1912, the Quartermaster Corps was formed and with it, an enlisted Quartermaster service corps was established. This marked the beginning of using service troops instead of civilians and combat soldier details.

Though private contracting in support of military operations as we know it today really begins in World War II (WWII), it was during the period from the Revolution through WWI, when the logistical system went through its greatest evolutionary change. During this period, the Army's logistical system matured and its contracting system evolved. Basic relationships, for better or worse, were established. Though leaders recognized the shortfalls of lacking support forces, the Army learned budgets and attitudes would not support large forces and coped with the using contractors to makeup for a lack of organic capability.

WORLD WAR II

Shortages of service support troops and the need to rapidly expand our logistics capability to support large forces made it necessary to employ a large number contractors in WWII. From an Army perspective, the use of foreign labor and manufacturer's technical representatives dominated. The competition for labor for mobilization at home, coalition warfare considerations and a shortage of transportation limited the numbers of U.S. contractors overseas. As in WWI, the Army turned to foreign labor to obtain the transportation, supply and general labor needed to support military operations. For every seven soldiers, there was nearly one civilian under contract to the Army. This ratio was up from twenty to one in WWI and would grow to nearly two and a half to one in the Korean conflict. Though effective overall, there were problems with the use of foreign labor in terms of efficiency, mismanagement and safety. British labor practices and old equipment resulted in the Army getting six hours of work for every eight hours pay, and the civilian truck drivers supporting Persian Gulf Command amassed a accident rate of 189.9 per million truck miles, versus a rate of 22.2 per million miles for Army troops. One survey of port operations in Iran and India concluded the use of native labor was more of a detriment than help.

A more positive experience in contractor operations was the use of manufacturer's technical representatives. Prior to U.S. entry into the war, the British wanted to establish and operate ordinance repair facilities in North Africa and the Middle East. The original plan was to provide contract support, but upon entry into the war, leadership desired to switch to troop labor. This proved to be impractical time-

wise and the work was ultimately accomplished by contract. Technicians were also sent to North Africa to build and operate a vehicle assembly plant, which came to be known as "Little Detroit."

An important lesson in the use of contractors on the battlefield came from the U.S. Navy. As was true for the Army, the Navy required large amounts of engineering support but possessed few forces to do the work. To construct air fields and ports in the Pacific, the Navy Civil Engineering Corps (CEC) contracted for engineering services. One firm, Pacific Naval Air Bases, contracted to construct an airfield, submarine base, tank farm, gun emplacements and housing on Wake Island. The Japanese invaded this island, killing almost one hundred men and capturing over one thousand. The Japanese placed these men in a prisoner of war camp, where they were held for the duration of the war. Added to this, were another seventy construction men on Guam and over three thousand civilians captured at Cavite and Corregidor. Although in some cases the contractors established funds to take care of the families and the President and the Congress, through the Longshoreman's Act of 1942, took steps to help the families of men captured or missing in a war zone, the capture of these men posed a significant challenge.

It is difficult to exaggerate the complexity of the legal and human problems which arose out of these hundreds of civilians being captured by the enemy and considered as prisoners of war. The men were employees of private contractors: as such, they were protected under workmen's compensation laws; but the Navy was under no legal responsibility either for their welfare or their wages. ... The contractors were in just as difficult a position. They were not obligated to continue paying the men, since the contract had been "breached by a third party." And even if the contractors were willing and able to continue payment, the cost-plus-fixed-fee Government contract made this difficult, if not impossible. 15

In the meantime the Navy experienced problems with engineering contractors elsewhere. Following the Pearl Harbor invasion, the reaction of civilian contractors was generally mixed. Some worked even harder than ever to help the U.S. prevail, but "the general reaction confirmed what the CEC had long feared: the civilian-worker plan for advanced bases was outmoded; it was not for this war." In Iceland the situation had deteriorated to the point where high wages and bonuses weren't enough to keep the contractors workers. The Navy response was to create an engineer force, the Seabees. This Navy experience demonstrates the limitations of contracting for services when the threat of capture or death becomes very real.

KOREAN AND VIETNAM WARS

In each of these wars, the limited mobilization of reserve forces necessitated an expanded use of contractors. Also, in both wars there was an imbalance in the Army force structure as the majority of the generating force resided in the reserve components. The bottom line was contractors made up for shortfalls in troop service support units. As in WW II, the Army again depended on foreign contract labor and contract technical specialists for much of its logistic support.

At the beginning of the Korean conflict, the Army 's combat support forces were at about one - fourth of their authorized strength. ¹⁷ To sustain itself, the Army contracted large amounts of civilian labor

from Japan and Korea. Most military vehicles came from the Japanese ordinance rebuild program and used contract Korean labor to maintain logistics bases. The Army also relied on chartered vessels to bring supplies into theater and paid more than four million dollars per month to operate railway services.¹⁸

In Vietnam, DOD policy limited the number of support forces to maximize the number of combat forces under imposed troop ceilings. For the first time, large numbers of contractors supported troops in the war zone. This was due to two primary factors: the increasing technical complexity of military equipment like helicopters, and the compartmented nature of military operations, with units located in enclaves. Contractors such as Pacific Architects & Engineers (PA&E) maintained over 200 installations, and other contractors provided services such as transportation, power production, communications support and depot operations. By the end of 1969, the U.S. Army had over fifty-two thousand contractors operating in Vietnam. Given the troop ceilings mentioned earlier, it would have been difficult, if not impossible to accomplish the mission in Vietnam without contractor support. But it is also worth noting in Vietnam, as had been true in the past, a shortage of ready logistics units helped drive the decision to contract for support. "DODs civilianization policies [prior to the war] were detrimental to logistics readiness. Having converted a large number of logistics spaces to civilian positions in the United States, the Army had diminished its ability to maintain its logistical rotation and training base."

THE GULF WAR

In many ways, the Gulf War witnessed trends established during Vietnam. Again, U.S. forces relied on large amounts of host nation support and increased their use of contractor technical support for complex weapon systems. In the early stages of the war, CSS units were in short supply. This followed the trend of past conflicts, but for a different reason. In the past there weren't many units available to send, or their use was limited by mobilization policy. In the Gulf War, the nature of the threat and available air and sea lift drove CS/CSS unit deployment. There was an immediate need to increase the available combat power in theater so the deployment of support units was delayed, causing a reliance on host nation support.

There was also a traditional shortage of logistics units such as petroleum supply, water supply and graves registration units, even though all units in the "total force" had been deployed. U.S. forces contracted for tentage, messing support and transportation, with most coming from host nation sources. In addition, over nine thousand U.S. contract personnel deployed to support the war effort. Among them were a substantial number of manufacturers technical representatives who, in the tradition of the Vietnam War, provided maintenance and other technical support for such complex weapon systems as the Bradley fighting vehicle, Abrams tank, Apache helicopter and Patriot air defense missile system. In fact, the aviation contractor field service representatives proved irreplaceable. 22

Though absolutely essential to operational success, contract support had its drawbacks on the modern battlefield. Gulf War contractors were procured at inflated prices, and it was fortunate the coalition forces had members, like Saudi Arabia, with substantial wealth to pay for the support. Cultural

differences also served to complicate matters. Middle Eastern business practices differed from those of the West, and religious limitations sometimes made it difficult to insure reliable support. Transportation posed a particularly difficult problem. Contract drivers were difficult to control, lacked a sense of urgency, and would not work on certain days for religious reasons. Concerns over reliability ultimately lead to the deployment of almost two thousand military drivers from the U.S. prior to the start of the ground offensive. Although contractors effectively augmented troop capability, troop construction was more reflective and responsive to the broad range of missions. Contractors were not available in high-risk areas, took longer to acquire than troops and required a formal design and contracting process. 24

Overall, senior leaders saw contractors as a force multiplier in the Gulf War. Some saw the displacement of soldiers as having long term adverse consequences by further diluting CSS capabilities. The bottom line was that contractors filled a clear void in the United State's ability to sustain its combat forces early in the war and provided a substantial contribution to the total logistics effort as the war progressed.

LOGCAP

To close our look at the historical use of contractors on the battlefield, this paper will examine the Logistics Civil Augmentation Program (LOGCAP), which has been used in major contingency operations since the end of the Gulf War. The roots of LOGCAP can be traced back to 1985 when the concept was formally identified in Army Regulation (AR) 700-13, Logistics Civil Augmentation Program (LOGCAP). Under AR 700-137, LOGCAP would "obtain civilian assistance in peacetime to meet U.S. Army crisis and wartime support requirements worldwide, through the advanced identification and planned acquisition and use of global corporate assets."26 Initially, the concept was to have each Army component of the regional unified commands individually develop LOGCAP contracts. The Third Army was the only Army component to make use of LOGCAP planning. 27 This contract however, was specific in scope and expired prior to the Gulf War. Subsequently the Deputy Chief of Staff for Logistics (DCSLOG), serving as proponent for LOGCAP and in coordination with U.S. Army Corps of Engineers (USACE), developed a revised concept. This concept involved a single, world wide umbrella contract to plan for and provide theater facilities and logistics services in support of contingency operations, sustaining twenty to fifty thousand soldiers. 28 The current LOGCAP contract with DYNACORP Inc., as its prime contractor, provides this umbrella logistics and construction support for five geographic regions.²⁹ Though originally intended to augment troop capabilities, LOGCAP has at times been used as a tool of first resort with mixed results.

Historically, LOGCAP was used in Somalia, Rwanda, Haiti, and the Balkans. LOGCAP was first used in Somalia, though not as originally intended. In fact, the contract was administered by another service, in support of joint forces, in a combat zone, to perform tasks it wasn't design to, in a region not originally expected. That it worked as well as it did is remarkable, but this severe test of the LOCAP concept provided insights on the advantages and limitations of this tool.

LOGCAP was intended to provide mission-based support to Army forces over a specified period. Because the situation in Somalia developed so rapidly, the Army allowed the Navy to execute the contract in support of Marines. Further, the contract was modified to provide humanitarian support, to support coalition forces and ultimately support United Nations forces. No LOGCAP doctrine existed, and the JTF Commander and staff learned to adapt LOGCAP as events progressed. Responsive support suffered from the need to refine the tasking process, provide for contractor security, and sort out funding issues. The contractor had to overcome lack of involvement in any of the military operational planning and lack of early information on the environment in which it had to operate. The LOGCAP contractor, Brown & Root, Inc., also had to overcome difficulties with problem subcontractors and learn how to manage operations in support of the military, especially in terms of progress reporting and operations security. Overall the two major problems were the incremental issuance of task orders and untimely incremental funding. In the end, the LOGCAP concept worked under tough conditions. The military experience in Somalia demonstrated the concept of a world wide umbrella contract for logistics support was workable.

In the Balkans, LOGCAP was used in support of Operation JOINT ENDEAVOR. The LOGCAP contractor, Brown & Root, Inc., built infrastructure for Army forces in Hungary and at one point the ratio of contractors to soldiers supported was one to one – six thousand soldiers supported by five thousand, nine hundred contract personel. In this case, the contractor had trouble meeting base construction requirements and much of the initial construction was done by Army Engineers, Navy Seabees, and Air Force Red Horse units. The Army V Corps G3 noted "we do not have an expeditionary force capability in Brown and Root." The Army's Peacekeeping Institute observed the LOGCAP contingency support lacked cohesiveness and was poorly integrated into the military logistics process. Based on experience to date, LOGCAP "lacked the ability to serve as an initial entry force."

The LOGCAP contract is still a work in progress, though it is sure to be used in the future. A 1998 Rand Corporation study concluded, "the services still require military support units that will continue their duties under conditions that will be intolerable for civilian organizations." But, given the historical problems with mobilization, competition for strategic lift, and low numbers of CS/CSS forces, LOGCAP is one of the few tools the Army has to provide responsive global logistics support. The quality of such support will be a function of the quality of the LOGCAP contractor and its subcontractors, improvement in joint logistics doctrine, and streamlining contracting procedures. In the final analysis, it appears that LOGCAP is not a tool of first resort to be used to replace troop units. More likely, LOGCAP will be used in the future in a more traditional role, to augment capability shortfalls and fill in gaps in areas where military forces lack technical expertise.

RECAP OF HISTORICAL EXPERIENCE

Historical experience demonstrates the Army has and must continue to adapt to the requirement to use contractors on the battlefield to make up for generating force shortfalls. As stated earlier, budgets

and policy have really left the Army with no other choice. Contractors have filled the gap when military units were in short supply or non-existent, when mobilization policy prevented it, when support forces had to compete for available air and sea lift delaying its arrival in theater, or when coalition or political conditions required it. Another important trend is the ratio of contractors to soldiers has increased over time.

Contractor performance on the battlefield has been mixed. In some cases contractors have performed brilliantly, augmenting capabilities and serving as a force multiplier. In other cases support was not responsive and in several cases, they drove the Army into a crisis situation. This performance, both good and bad, was a function of both the quality of the contractors themselves and the quality of the military supervision they received. With the exception of manufacturers technical support, contract support has mostly served to augment generating forces, not replace them. Further, they historically have worked best when risk of death or capture was relatively low.

The most alarming trend is our seeming inability to learn from over two hundred years of experience with using contractors in support of military operations. The concerns expressed by the Continental Congress are echoed in the most recent writings on this subject. Issues expressed about effective military management and timely payment of contractors haven't changed at all. Further, in each conflict, there is almost universal agreement that use of contractors versus military support forces was the necessary, but not preferred course of action. Our leaders stand before us today, grappling with the same issues their predecessors did when the nation was born.

ADVANTAGES AND DISADVANTAGES OF CONTRACTING CS/CSS SUPPORT ON THE BATTLEFIELD

Based on the preceding historical survey, it is clear contracting support for military has both advantages and disadvantages. The main advantages of contracting battlefield support are: wide range of available capabilities, rapid deployment by using local labor and materials, not being bound by so many government restrictions and perhaps cost. Primary disadvantages include responsiveness to changing tactical situation, potential lack of trust by the units they support, variability in contractor performance, a need to maintain a military contract management system, and the need for the military to provide a secure work environment. A detailed discussion of advantages and disadvantages follows.

Contracting support for military operations has some clear advantages. Perhaps the most obvious advantage is the broad range of capabilities available in the private sector, thereby giving contractors the ability to provide support that simply does not exist in the military. This is becoming particularly important with the increasing complexity of military systems, as witnessed by the use of manufacturers technical representatives since the Vietnam War. Another advantage, demonstrated most notably in the Spanish American War, Korea and the Gulf War, is when rapid mobilization is required. In these cases, the Army had to use contractors, because it was the only way to support operations as contractors were able to use manpower already in theater. Contractors made effective use of foreign labor to get the job and did not have to compete for scarce military lift to deploy to theater.

Contractors do not have to adhere to certain political or government restrictions. For example in Vietnam, contractor logistics forces did not count in force caps calculations, meaning more combat force could be applied to the war effort. Another advantage was contractors are not bound by government procurement policies. In Somalia, the Marines used LOGCAP extensively to circumvent a lengthy procurement process to rapidly obtain critical supplies like oil and water. Also, in circumstances where security doesn't preclude it, contractors can cross political boundaries to obtain resources where the military could not. Again, in Somalia, the LOGCAP contractor overcame a serious shortage of communications assets in theater by using Russian radios to maintain communications with its home office. In summary, the lack of governmental restrictions allows a contractor to use initiative and creativity to overcome problems in either austere or politically sensitive environments.

Finally, and perhaps subject to the greatest debate, is the potential for providing support at lower cost. After research, I don't believe cost is a primary consideration in the historical use of contractors in combat. There are two aspects to an analysis of cost – the cost of paying for maintaining forces not being used in support of operations and the comparative savings of contractors over troop units in support of operations. From the first aspect, there really isn't a "savings" as generating force spaces are used to preserve operating force spaces. In terms of the second aspect of cost savings in the support of operations, any data used to support such claims would be of suspect quality given the poor bookkeeping that has been a consistent problem. But more fundamentally, one would be attempting to compare support provided under materially different conditions. Historically troops were used to provide support under more challenging conditions. Perhaps as our involvement in peace operations grows, fairer comparisons may be made. In summary, cost was historically a secondary consideration and not a major factor in decisions to use contractors over troops.

Contracting for support on the battlefield certainly has disadvantages, the most significant involving command and control and mutual trust.³⁶ Though contractors may be managed through Contracting Officers Representatives, Military Commanders cannot exercise direct command and control over contractors and their personnel, except in those rare circumstances where war has been declared. There have been attempts to remedy this situation. Senate Bill S.768, *The Military and Extraterritorial Jurisdiction Act of 1999*, allows commanders to take action in the event of "serious" crimes, but doesn't provide the same degree of control by having Uniform Code of Military Justice (UCMJ) jurisdiction over contractor.³⁷ But legalities aside, there is a more fundamental cultural difficulty. Contract personnel, by choice, are not members of the military and do not want to be treated as such. This leads us to the second major disadvantage embodied in the following quote – the issue of trust.

Soldiers providing combat service support are trained and conditioned to accomplish their tasks in a combat environment. They know the stakes. They know their fellow soldiers in combat are counting on them. While perhaps more importantly, those in combat conduct their operations with full confidence they will receive the support they need. Reliance and trust is based on military discipline and professionalism. If this is lost, or even put in doubt, a military mission may be put into peril. Will combat soldiers have the same level

of confidence in civilian contractors providing support as they do soldiers? Why should they?³⁸

Even by attempting to establish habitual support relationships, such as is the case with many contractor's manufacturer's representatives, this trust and confidence issue is still in doubt. Though technically more competent, contractor personnel's physical condition and combat survival skills, like NBC proficiency, may be in question. Should he or she succumb to the rigors of combat, the whole team will suffer. Perhaps more importantly, the bottom line is that they are under no real obligation to do their job when the going gets tough. Oh certainly, there are contractual remedies the government can seek, but that does nothing to solve the immediate problems of the commander and his soldiers on the ground. A favorable settlement on behalf of the government later on does them no good if the mission fails.

Contracting presents other disadvantages as well. As stated earlier, performance is a function of the quality of the contractor and its sub-contractors. Though the government tracks contractor performance, there is no way to predict performance with certainty. Though this is also true for troop units, the military provides uniform standards and trains units to provide support in combat conditions. Contractors come as they are, with expertise gleaned largely from peacetime experience. While there is screening for the prime contractor, rarely are sub-contractors screened, and sub-contractors can make or break the success of the prime contractor. Another disadvantage of contracting falls in the general area of command burden.³⁹ Though very capable, contractors require the commander to provide security, a tasking mechanism, and a contract management system, especially capable for providing prompt payment. Non linear battlefields will provide a particular challenge in keeping contractor work environments secure, and making timely payments has historically been difficult. Many times, the inability to provide for prompt payment was beyond the military commander's control and incremental funding hampered the commander's ability to integrate support with combat operations.

CRITERIA FOR USING CONTRACT SUPPORT ON THE BATTLEFIELD

Based on the advantages and disadvantages previously discussed, the next logical step is to establish criteria for using contract CS/CSS support of the battlefield. Later this criteria will be used as a "yardstick" to assess the USD (A&T) proposal to civilianize the generating force. This paper will identify situations where the use of contractors in support of military operations makes sense and situations where contract support should be avoided.

In defining criteria for when the Army should use contractors, historical trends demonstrate we must be prepared to use contractors when no military support units are available. This has been true since the Revolutionary War and will be true in the future. In other cases, some support units were available, but not enough to meet requirements. Military leaders today almost universally accept the concept of using contract support to augment troop units either to make up for capacity shortfalls or to hasten completion of the work. We witnessed just such an example in Desert Storm, when the all "total force" assets were mobilized, but contractors had to be called in because the workload was too great. As

a further example, LOGCAP contractors followed behind combat engineers in Bosnia, finishing the construction of base camps after the engineers completed the earthwork. The two worked as a team to speed base camp construction. It also makes sense to use contract CS/CSS support for new technologies, like the time when contractors operated railroad and telegraph systems in the Civil War. This can be done as long as the risk of capture or harm is low. In all of these situations contractors perform useful functions, with little risk to themselves or the military units they support. Therefore, the Army should consider using contractors when one or more of the criteria in Figure 3 apply.

USE CONTRACTORS WHEN:

- NO SUPPORT UNITS ARE AVAILABLE
- THERE IS A NEED TO COMPENSATE FOR TROOP CAPACITY SHORTFALLS
- WHEN RISK TO SUPPORTING ORGANIZATION IS LOW

FIGURE 3 CRITERIA FOR WHEN CONTRACTORS CAN BE USED

We have seen historical situations where the use of contractors should clearly have been avoided. First and foremost, the military should avoid using contract CS/CSS support when the supporting unit requires a self-protection capability. For example, an engineer unit constructing a combat trail in a hostile area can, if called upon, cease construction activities and defend itself against modest threats. The same is true for operations in an NBC environment or other situations where special military training is required to ensure mission accomplishment. Another situation, where contract CS/CSS support is unsuitable, is when military command over the supporting force is required. These situations usually involve support of forces in direct contact with the enemy, or where a large degree of responsiveness, agility and flexibility are required. There are times when the situation simply doesn't allow time for contract modifications, providing detailed designs or instructions, or when record-keeping is impractical. Here the major risk is endangering combat forces due to non-responsive support. This situation is somewhat related to the next; a situation where there is an experienced long-term record of failure to provide contract CS/CSS support. This would be similar to the WWII experience where host nation contractor labor proved more a detriment than a help. Finally, contractors should not be used to command and control logistical operations. This task should only be accomplished by military commanders. Therefore, the Army should not use contractors in support of military operations when one or more of the criteria listed in Figure 4 apply.

AVOID USE OF CONTRACTORS WHEN:

- CS/CSS UNIT REQUIRES A SELF-PROTECTION CAPABILITY
- WHEN DIRECT MILITARY C2 OVER THE SUPPORTING UNIT IS REQUIRED
- WHEN THE RECORD FOR CONTRACT SUPPORT FOR PARTICULAR SERVICE IS BAD
- PURPOSE IS TO PROVIDE COMMAND & CONTROL (C2)

FIGURE 4 CRITERIA FOR WHEN CONTRACTORS SHOULD NOT BE USED

USD (A&T) PROPOSAL TO CIVILIANIZE GENERATING FORCE

In the beginning of this paper, I described the USD (A&T) proposal for the civilianization of 228K CS/CSS MTOE unit spaces. This paper will now analyze this proposal using the criteria established in the last section, as it relates to engineer units. There are two reasons for choosing engineer units. First, it is the author's area of technical expertise, where an informed assessment of the effectiveness of contractors versus military units can be made. Second, although they account for only 4,040 of the 228K spaces, engineer units pose an interesting challenge as they provide a wide variety of CS and CSS almost everywhere on the battlefield. Lessons learned in applying the proposed criteria to engineer units can be extrapolated to other CS/CSS type units. Under the USD (A&T) proposal, the engineer units listed in Table 1 would be civilianized. The selected units perform a wide variety of combat and combat support functions. It is also interesting to note, the engineer units identified in this sample are located throughout the battlefield. Some units provide support in the Communication Zone (COMMZ), while others provide support to units in direct contact with the enemy. This sample provides an opportunity to apply most of the criteria identified in the previous section of this paper.

MTOE #	UNIT NAME	# UNITS	# SPACES	TOTAL SPACES	SPECIAL
05601L	HQ, ENCOM	2	226	452	C2
05601L	HQ, EN BDE , THEATER	4	120	480	C2
05530LA	DIVING TEAM HEAVY	. 2	25	50	CBT
05530LB	DIVING TEAM LIGHT	4	24	96	CBT
05601L	EN PORT OPENING CO	2	203	406	CBT
05343L	PIPELINE COMPANY	3	170	510	
05520L	EN QUARRY TM	9	53	477	
05530L C	REAL ESTATE TEAM	2	15	30	
05530LD	UTILITIES TEAM	27	57	1,539	

TABLE 1 ASA (A&T) PROPOSAL FOR ENGINEER UNITS

A quick review of the engineer units identified in the proposal reveals several units which meet the criteria where contracting should be avoided. First, the ASA (A&T) proposal lists six engineer command and control headquarters for conversion. Based on the criteria that command and control (C2) should not be contracted, and given these six organizations are key theater-level C2 headquarters, the Engineer Command (ENCOM) and Engineer Theater Brigade Headquarters should be removed from consideration for conversion. Second, several units listed in the proposal require a self-protection capability. Both the Heavy and Light Diving Teams perform combat missions, such as shore reconnaissance and emergency salvage operations. The same is true for the Port Opening Companies, which provide the Army with its sole ability to open ports in a hostile environment. The three Pipeline Companies are designed to construct pipelines throughout the theater of operations, and the Utilities Teams provide the Army with its sole means of distributing tactical power throughout the battlefield. These units possess a self-protection capability and often fulfill construction requirements in the combat zone. All of these units provide the Army with low-density combat support capabilities and operate in environments where the risk to contract personnel would be considered excessive. Therefore, none of these units is suitable for conversion using the proposed criteria.

The remaining units meet the criteria for contract support. Neither the Engineer Quarry Team, nor the Real Estate Team, perform tasks that are exclusively military and both units types typically operate in non-hostile environments. Department of the Army (DA) civilians provide most of the estate support to military operations so the real estate teams could be converted. The quarry team positions also meet the criteria for conversion. Typically these operations are done in a secure environment and given there are a total of twenty-one such units in the Army inventory, there is a nucleus of troop capability remaining should these nine units be converted.

Applying the criteria for contract suitability to the engineer units proposed for conversion resulted in eleven units being recommended for conversion. Units which performed high-risk functions or command and control functions were preserved. Several units met the criteria for contacting as they typically operate in low risk environments. The results of applying the criteria to the USD (A&T) proposal for engineer units follows.

TOTAL SPACES CONSIDERED:	4,040	
UNSUITABLE FOR CONTRACT (C2):	932	
UNSUITABLE FOR CONTRACT (CBT RISK):	2,091	
CONVERTABLE SPACES:	507	

TABLE 2 APPLICATION OF CRITERIA TO USD (A&T) PROPOSAL

The value of applying criteria such as those suggested here, is that it provides a standard framework to make force reduction arguments. Given the stressful and somewhat essential nature of force reduction decisions, it helps to find ways to focus the debate to the important issues. Here we've reduced the number of spaces subject to debate by eighty-seven percent. Moreover, the criteria used are derived from strong historical precedent, rather than some obscure statistical analysis.

CONCLUSION

Pressures to find ways to reduce generating forces will continue as long as civilian leaders perceive there is little threat of a major conflict. Military leaders will continue to sacrifice generating forces to preserve operational forces. Should the Army be faced with the choice of eliminating generating forces by relying on battlefield contractors, we should not ask ourselves if we can do it. We can, but we should not repeat the mistakes of the past. The Army should adopt criteria like that established in this paper, to determine if such force reductions are proper.

WORD COUNT = 7104

ENDNOTES

¹ Deputy Secretary of Defense John Hamre, "Department of Defense Reform Initiative Directive #20: Review of Inherently Governmental Functions," Memorandum for Secretaries of the Military Departments.
Washington, D.C., 16 January 1998.
² Ibid
³ LTC David Pearsall, "Total Army Analysis Overview" briefing slides at GOSAG III, FT Belvoir, VA, 10 May 1999.
⁴ Dr. Charles R. Shrader, "Contractors on the Battlefield," <u>Institute of Land Warfare (Association of the U.S. Army</u> (May 1999): 2.
⁵ Ibid
⁶ Ibid,., 3.
⁷ Ibid., 5.
⁸ Chief of Military History, BG John S. Brown, "Contractors on the Battlefield: An historical Survey Form the Civil War to Bosnia," Memorandum for Department of the Army, Office of the Assistant Secretary of the Army for Force Management, Manpower and Resources, Washington, D.C. 30 June 1999.
⁹ Ibid
Department of the Army, <u>American Military History</u> (Washington, D.C.: Center for Army History, 1989), 349.
¹¹ Shrader, 6.
¹² Brown, 4.
¹³ Ibid
¹⁴ Ibid, 5.
¹⁵ William Bradford Huie, <u>Can Do! The Story of the Seabees</u> ,(New York; E.P. Dutton & Co. Inc, 1944), 77.
¹⁶ Ibid, 79.
¹⁷ Brown, 6.
¹⁸ Ibid
¹⁹ Brown, 7.
²⁰ Ibid

BIBLIOGRAPHY

- Brown, John S., BG, Chief of Military History. "Contractors on the Battlefield: An historical Survey Form the Civil War to Bosnia." Memorandum for Department of the Army, Office of the Assistant Secretary of the Army for Force Management, Manpower and Resources. Washington, D.C. 30 June 1999.
- Campbell, Gordon I. Contractors on the Battlefield: The Ethics of Paying Civilians to Enter Harm's Way and Requiring Soldiers to Depend on Them (Washington, D.C.: Department of the Army, Jan 2000), 1.
- Fritz, William. Former Commander, 94 Engineer Battalion (Combat) (Heavy). Interview by author, 8 Dec 1999, Carlisle PA.
- Hamre, John, Deputy Secretary of Defense. "Department of Defense Reform Initiative Directive #20: Review of Inherently Governmental Functions." Memorandum for the Secretaries of the Military Departments. Washington, D.C., 16 January 1998.
- Henry, Patrick T. Assistant Secretary of the Army (Manpower and Reserve Affairs) "Update of Defense Reform Initiative (DRID) 20 for Purposes of Federal Activities Inventory Reform Act Implementation." Memorandum for Army Major Commands. Washington, D.C., June 1999.
- Huie, William Bradford. Can Do! The Story of the Seabees. New York; E.P. Dutton & Co. Inc, 1944.
- Pearsall, David LTC. "Total Army Analysis Overview." Briefing slides at GOSAG III, FT Belvoir, VA, 10 May 1999.
- Runkle, John. "Force Feasibility Review." Briefing slides, Washington, D.C., 20 Aug 1999.
- Shrader, Charles R., Dr. "Contractors on the Battlefield," <u>Institute of Land Warfare (Association of the U.S.</u>
 Army, May 1999, 1-16.
- Malley, Peter. U.S. Army Engineer School, Combat Developments. Telephone interview by author, 3 Feb 1999.
- McDonnell, Janet A. Logistics Civil Augmentation Program (LOGCAP) Supporting the Troops in Operation Restore Hope. Alexandria: USACE Office of History, 1994.
- McDonnell, Janet A. The U.S. Army Corps of Engineers in the Persian Gulf War. Alexandria: USACE Office of History, 1996.
- U.S. Department of the Army. <u>American Military History</u>. Washington, D.C.: Center for Army History, 1989.
- U.S. Department of the Army. <u>Logistics Civil Augmentation Program (LOGCAP)</u>. Army Regulation 700-137. Washington, D.C.: U.S. Department of the Army, 16 September 1985.
- U.S. Army Corps of Engineers. <u>Engineer Memoirs lieutenant General Carroll H. Dunn</u>. Alexandria: USACE Office of History, 1998.